

CLAIMS

1. A prophylactic/therapeutic agent for cancer, comprising a compound or its salt that inhibits the activity of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.
2. A prophylactic/therapeutic agent for cancer, comprising a compound or its salt that inhibits the expression of a gene for a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.
3. An antisense polynucleotide comprising the entire or part of a base sequence complementary or substantially complementary to a base sequence of a polynucleotide encoding a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide.
4. A prophylactic/therapeutic agent for cancer, comprising the antisense polynucleotide according to claim 3.
5. A prophylactic/therapeutic agent for cancer, comprising an antibody against a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.
6. The prophylactic/therapeutic agent for cancer according to claim 1, 2, 4 or 5, wherein said cancer is colon cancer, breast cancer, lung cancer, pancreatic cancer or ovary cancer.
7. A diagnostic agent for cancer comprising an antibody against a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.
8. A diagnostic agent for cancer comprising a polynucleotide encoding a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide.
9. The diagnostic agent according to claim 7 or 8, wherein said cancer is colon cancer, breast cancer, lung cancer, pancreatic cancer or ovary cancer.
10. A prophylactic/therapeutic agent for a compound or its salt having an action of inhibiting enzyme activity to transfer the methyl group(s) to the lysine 9 and/or 27 residue of histone H3.
11. An apoptosis inducing agent comprising a compound or its salt having an action of inhibiting enzyme activity to transfer the methyl group(s) to the lysine 9

and/or 27 residue of histone H3.

12. A prophylactic/therapeutic agent for cancer comprising a compound or its salt having an action of inhibiting expression of enzyme to transfer the methyl group(s) to the lysine 9 and/or 27 residue of histone H3.

13. An apoptosis inducing agent comprising a compound or its salt having an action of inhibiting expression of enzyme to transfer the methyl group(s) to the lysine 9 and/or 27 residue of histone H3.

14. A method of screening a prophylactic/therapeutic agent for cancer, which comprises using a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.

15. A kit for screening a prophylactic/therapeutic agent for cancer, comprising a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.

16. A method of screening a prophylactic/therapeutic agent for cancer, which comprises using a polynucleotide encoding a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide.

17. A kit for screening a prophylactic/therapeutic agent for cancer, comprising a polynucleotide encoding a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide.

18. An apoptosis inducing agent comprising a compound or its salt that inhibits the activity of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.

19. An apoptosis inducing agent comprising a compound or its salt that inhibits the expression of a gene for a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.

20. A method of screening an apoptosis inducing agent, which comprises using a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.

21. A method of screening an apoptosis inducing agent, which comprises using DNA encoding a protein having the same or substantially the same amino acid sequence

as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide.

22. A method of preventing/treating cancer, which comprises administering to a mammal an effective dose of (i) a compound or its salt that inhibits the activity of a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, (ii) a compound or its salt that inhibits the expression of a gene for said protein, its partial peptide or a salt thereof, (iii) an antibody against said protein, its partial peptide or a salt thereof, or (iv) an antisense polynucleotide comprising the entire or part of a base sequence complementary or substantially complementary to a base sequence of a polynucleotide encoding said protein or its partial peptide.

23. A method of inducing apoptosis, which comprises administering to a mammal an effective dose of (i) a compound or its salt that inhibits the activity of a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, (ii) a compound or its salt that inhibits the expression of a gene for said protein, its partial peptide or a salt thereof, (iii) an antibody against said protein, its partial peptide or a salt thereof, or (iv) an antisense polynucleotide comprising the entire or part of a base sequence complementary or substantially complementary to a base sequence of a polynucleotide encoding said protein or its partial peptide.

24. A method of preventing/treating cancer, which comprises inhibiting the activity of a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, or inhibiting the expression of a gene for said protein, its partial peptide, or a salt thereof.

25. A method of inducing apoptosis, which comprises inhibiting the activity of a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, or inhibiting the expression of a gene for said protein, its partial peptide, or a salt thereof.

26. Use of (i) a compound or its salt that inhibits the activity of a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, (ii) a compound or its salt that inhibits the expression of a gene for said protein, its partial peptide or a salt thereof, (iii) an antibody against said protein, its partial peptide or a salt thereof, or (iv) an antisense polynucleotide comprising the entire or part of a base sequence complementary or substantially complementary to a base sequence of a

polynucleotide encoding said protein or its partial peptide, to manufacture a prophylactic/therapeutic agent for cancer.

27. Use of (i) a compound or its salt that inhibits the activity of a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, (ii) a compound or its salt that inhibits the expression of a gene for said protein, its partial peptide or a salt thereof, (iii) an antibody against said protein, its partial peptide or a salt thereof, or (iv) an antisense polynucleotide comprising the entire or part of a base sequence complementary or substantially complementary to a base sequence of a polynucleotide encoding said protein or its partial peptide, to manufacture an apoptosis inducing agent.